California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

NOTICE OF PUBLIC HEARING
for
Order No. R8-2006-0004

Amending Order No. R8-2003-0061, NPDES No. CAG998001
General Waste Discharge Requirements for Discharges to Surface Waters That Pose An Insignificant (De Minimus) Threat to Water Quality

On the basis of preliminary staff review and application of lawful standards and regulations, the California Regional Water Quality Control Board, Santa Ana Region, proposes to amend Order No. R8-2003-0061, NPDES No. CAG998001 to include decanted filter backwash wastewater and/or sludge dewatering filtrate water discharges from water treatment facilities as one of the types of discharges regulated by the De Minimus Permit Order No. R8-2003-0061.

The Board is seeking comments concerning the proposed amendment to the general waste discharge requirements. The Board will hold a public hearing to consider adoption of the proposed amendment as follows:

DATE:	January 18, 2006
TIME:	9:00 a.m.
PLACE:	City Council Chambers of Loma Linda 25541 Barton Road Loma Linda

Interested persons are invited to submit written comments on the proposed Amending Order No. R8-2006-0004. Interested persons are also invited to attend and express their views on issues relating to the proposed Order. Oral statements will be heard, but should be brief to allow all interested persons time to be heard. For the accuracy of the record, all testimony (oral statements) should be submitted in writing.

Although all comments that are provided up to and during the public hearing on this matter will be considered, receipt of comments by January 2, 2006 would be appreciated so that they can be used in the formulation of the draft Order that will be transmitted to the Board two weeks prior to the hearing. To view or download a copy of the draft Order that the Board will consider at its meeting, please access our website at *www.waterboards.ca.gov/santana* on or after January 9, 2006.

The Board's proposed Order, related documents, and all comments and petitions received may be inspected and copied at the Regional Board office, 3737 Main Street, Suite 500, Riverside, CA 92501-3348 (phone 951-782-4130) by appointment scheduled between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday. Copies of the proposed Order will be mailed to interested persons upon request to J. Shami at (951) 782-3288).

Any person who is physically challenged and requires reasonable accommodation to participate in this Regional Board Meeting should contact Catherine Ehrenfeld at (951) 782-3285 no later than January 11, 2006.

Please bring the foregoing to the attention of any persons known to you who would be interested in this matter.

California Regional Water Quality Control Board
Santa Ana Region

January 18, 2006

STAFF REPORT

ITEM:

SUBJECT: Amendment to Order No. R8-2003-0061, NPDES No. CAG998001 – General Waste Discharge Requirements for Discharges to Surface Waters That Pose An Insignificant (De Minimus) Threat to Water Quality, Order No. R8-2006-0004

I. SUMMARY:

On August 22, 2003, the Board adopted Order No. R8-2003-0061, NPDES No. CAG998001, general waste discharge requirements for discharges to surface waters that pose an insignificant (De Minimus) threat to water quality. It is appropriate to revise Order No. R8-2003-0061, to include decanted filter backwash wastewater discharges from water treatment facilities as one of the types of discharges regulated by Order No. R8-2003-0061.

II. DISCUSSION:

Order No. R8-2003-0061 currently regulates the following types of discharges:

a. Construction dewatering wastes;
b. Wastes associated with well installation, development, test pumping and purging;
c. Aquifer testing wastes;
d. Dewatering wastes from subterranean seepage, except for discharges from utility company vaults;
e. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
f. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
g. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
h. Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;
i. Discharges from fire hydrant testing or flushing;
j. Non-contact cooling water;
k. Air conditioning condensate;
l. Swimming pool drainage;
m. Discharges resulting from diverted stream flows; and
n. Other similar types of wastes, which pose a de minimus threat to water quality, yet technically must be regulated under waste discharge requirements.

The most common treatment required for de minimus discharges is settling and/or dechlorination. Settling is used for those discharges with high settleable solids concentrations. Discharges with residual chlorine, such as wastewater from hydro-testing of pipes and storage tanks, swimming pool drainage, and development and purging of wells, must be dechlorinated, unless the concentration is depleted by natural processes prior to mixing with the receiving water. If dechlorination is not accomplished naturally, the most common method of dechlorination is with the use of chemicals.

Water Treatment Plants are facilities that treat groundwater or surface water or a blend of the two to produce potable water. The treatment processes include coagulation, sedimentation and filtration to remove suspended solids (SS), iron and other pollutants from the intake water. Aluminum sulfate is the chemical agent most commonly used for coagulation/flocculation of suspended solids in the treatment processes. Wastewater discharges come mainly from backwashing of filters and dewatering of sludge. Filter backwash wastewater or spent filter backwash water contains many of the particles that were trapped in the filter during operation, including coagulants, metals, and microbes such as *Cryptosporidium.* Several studies have documented a range of *Cryptosporidium* oocyst concentrations in spent filter backwash from non-detect to over 15,000 oocysts/100 L, (EE&T, 1999). If filter backwash wastewater is discharged to surface water, *Cryptosporidium* may also be discharged with the filter backwash wastewater. However, because many animals carry *Cryptosporidium*, it is common in both soil and untreated water. Lakes, rivers and streams can become contaminated by runoff that contains waste from infected animals. Wildlife can also contaminate water. Research shows that *Cryptosporidium* can be found in 97% of surface waters in the U.S. The amount of the parasite in water sources varies widely. Groundwater can, but is much less likely to, contain *Cryptosporidium.* Tests for *Cryptosporidium* are oftentimes inconclusive, costly and difficult.

The other pollutant of concern from filter backwash wastewater discharges is total suspended solids. Settling of the wastewater prior to discharge normally addresses this problem. Iron and aluminum may also be discharged but there are no data available to determine reasonable potential for such constituents to be discharged at concentrations that would affect water quality.

Currently, the Regional Board has adopted three individual waste discharge requirements (WDR) for discharges of filter backwash wastewater from three separate water treatment facilities. Evaluation of existing waste discharge requirements issued to water treatment facilities for discharges of filter backwash water indicate that such discharges could also be regulated under the general permit Order No. R8-2003-0061. The individual WDRs regulating the water treatment plant filter backwash wastewater include effluent limitations for total suspended solids, total dissolved solids, and total residual chlorine. The WDRs for one facility include an effluent limit for turbidity. Recently, Board staff received three new applications for waste discharge requirements from three water treatment facilities for filter backwash wastewater discharges into surface waters. Filter backwash water discharges pose an insignificant threat to water quality.

Specifically for filter backwash wastewater discharges, the proposed amended Order does not include effluent limits for *Cryptosporidium* but does include a maximum daily effluent total

suspended limit of 30 milligram per liter (mg/L) based on secondary treatment standards and based on best professional judgment. Secondary treatment standards require discharges from publicly owned treatment works to meet an average monthly total suspended limit of 30 mg/L. Thus, it is appropriate to require that intermittent discharges, such as filter backwash wastewater, meet a maximum daily limit of 30 mg/L. Specifically for filter backwash wastewater discharges, the proposed amended Order also requires monitoring for iron, manganese and aluminum for those water treatment facilities that have the potential for discharging such constituents.

It is appropriate to amend Order No. R8-2003-0061 to include decanted filter backwash wastewater discharges, including filtrate water from sludge dewatering, from water treatment facilities as one of the types of discharges regulated by Order No. R8-2003-0061.

The following changes to the Order are proposed: (additions are boldface and highlighted, deletions are struck out). Only the revised Footnote reference numbers are shown for those Footnote references in the existing Order that would be affected numerically by the proposed amendments but for which no substantive changes in text are proposed

1. Order No. R8-2003-0061, Page 3 of 14, revise Finding 9 as follows:

   9. This general permit regulates de minimus discharges (as listed ~~in Finding No. 1, above~~ **below**) to surface waters. An entity(ies)/individual(s) proposing de minimus discharges is hereinafter referred to as "*discharger*" and upon authorization, is subject to the terms and conditions of this Order.

      a. Construction dewatering wastes; (except storm water dewatering at construction sites)[1];
      b. Wastes associated with well installation, development, test pumping and purging;
      c. Aquifer testing wastes;
      d. Dewatering wastes from subterranean seepage, except for discharges from utility company vaults;
      e. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
      f. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
      g. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
      h. Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;
      i. Discharges from fire hydrant testing or flushing;
      j. Non-contact cooling water;
      k. Air conditioning condensate;
      l. Swimming pool drainage;
      m. Discharges resulting from diverted stream flows;

n. Other similar types of wastes that pose a de minimus threat to water quality, yet technically must be regulated under waste discharge requirements; and

o. Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities.

2. Order No. R8-2003-0061, Page 5 of 14, revise Finding 19 as follows:

19. The de minimus discharges described in Finding No. ~~1~~ **9**, above are not expected to cause toxicity, therefore no toxicity limits are specified in this general permit.

3. Order No. R8-2003-0061, Page 6 of 14, revise first paragraph as follows:

IT IS HEREBY ORDERED that dischargers, their agents, successors, and assigns, who are discharging the types of wastes listed in Findings No. ~~1~~ **9**, above, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

4. Order No. R8-2003-0061, Page 6 of 14, revise Discharge SpecificationsA.1. to include A.1.a. and A.1.b., as follows:

1. The discharge of wastewater shall not contain constituent concentrations in excess of the following limits:

a. For types of discharges a through n (listed in Finding No. 9, above),

EFFLUENT LIMITATIONS APPLICABLE TO ALL RECEIVING WATERS	
Constituent	Maximum Concentration
Oil and Grease	15 mg/l
Sulfides	0.4 mg/l
Total Residual Chlorine[3]	0.1 mg/l
Total Suspended Solids[4]	75 mg/l
Total Petroleum Hydrocarbons	100 µg/l (ppb)

b. The discharge of decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities (Finding No. 9.o.,

above), shall not contain a total suspended solids maximum daily concentration in excess of 30 mg/L.

5. Order No. R8-2003-0061, Page 13 of 14, revise Application Requirements I.2, as follows:

2. **FOR A NEW DISCHARGER**[5]: At least 60 days before the intended start of a new discharge or individual permit expiration; the discharger shall submit an application for coverage under this Order. The authorization letter from the Executive Officer is required prior to commencement of the discharge for those types of wastes covered by this permit as described in Finding No. ~~1.~~**9**. The application shall consist of the following information:

6. Monitoring & Reporting Program No. R8-2003-0061, Page 3 of 5, revise Effluent Monitoring B.2. to include B.2.a. and B.2.b. as follows:

2. The following shall constitute the effluent monitoring program:

a. For types of discharges a through n aslisted in Finding 9 of the Order:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling and Analysis
Flow	---------	gpd	Daily
Oil and Grease	Grab	mg/l	During the first 30 minutes of each discharge and as directed by the Executive Officer, thereafter
Sulfides	"	"	"
Total Residual Chlorine[1,2]	"	"	"
Total Suspended Solids[2]	"	"	"
Total Dissolved Solids	"	"	"
Total Inorganic Nitrogen	"	"	"
Total Petroleum Hydrocarbons	Grab	mg/l	"

b. For the type of discharge listed in Finding 9.o. of the Order, the following shall constitute the effluent monitoring program:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling and Analysis
Flow	---------	gpd	Daily
Total Residual Chlorine[1,2]	Grab	mg/l	During the first 30 minutes of each discharge and as directed by the Executive Officer, thereafter
Total Suspended Solids[2]	"	"	"
Aluminum	"	µg/l (ppb)	"
Iron	"	"	"
Manganese	"	"	"

7. Monitoring & Reporting Program No. R8-2003-0061, Page 4 of 5, revise Reporting C.2.1) as follows:

1) Specific type of the proposed wastewater discharge (see listing on Finding ~~1~~ 9of the Order);

III. WRITTEN COMMENTS:

Interested persons are invited to submit written comments on the proposed discharge limits and the Fact Sheet. Comments should be submitted by January 2, 2006, either in person or by mail to:

J. Shami
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

IV. INFORMATION AND COPYING:

Persons wishing further information may write to the above address or call J. Shami of the Regional Board at (951) 782-3288. Copies of the application, proposed waste discharge requirements, Fact Sheet, and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday (excluding holidays).

V. REGISTER OF INTERESTED PERSONS:

Any person interested in a particular application or group of applications may leave his/her name, address, and phone number as part of the file for an application.

VI. PUBLIC HEARING:

The Regional Board will hold a public hearing regarding the proposed waste discharge requirements as follows:

DATE:	January 18, 2006
TIME:	9:00 a.m.
PLACE:	City Council Chambers of Loma Linda 25541 Barton Road Loma Linda

RECOMMENDATION:

Adopt Order No. R8-2006-0004, amending Order No. R8-2003-0061, NPDES No. CAG998001, as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) - Doug Eberhardt
U.S. Army District, Los Angeles, Corps of Engineers - Regulatory Branch
U.S. Fish and Wildlife Service - Carlsbad
State Water Resources Control Board, Office of the Chief Counsel – Jorge Leon
State Water Resources Control Board, Division of Water Quality - James Maughan
State Department of Water Resources - Glendale
State Department of Fish and Game – Los Alamitos
State Department of Health Services, Santa Ana - Cor Shaeffer
State Department of Health Services, San Bernardino - Sean McCarthy
State Department of Health Services, San Diego - Steven Williams
Orange County Public Facilities and Resources Department - Chris Crompton
Orange County Health Care Agency - Seth Daugherty

Orange County Water District – Nira Yamachika
Riverside County Environmental Health Department - Sandy Bunchek
San Bernardino County Dept of Public Works, Env. Management Division – Naresh Varma
San Bernardino County Environmental Health Department – Daniel Avera
City of Fullerton Fire Department - John White
City of Santa Ana Fire Department - Bruce Guy
City of Orange Fire Department - Anne Bland
South Coast Air Quality Management District - Barry Wallerstein
City of Santa Ana - City Manager
Orange County Coastkeeper – Garry Brown
Lawyers for Clean Water C/c San Francisco Baykeeper
And the attached mailing list (current enrollees)

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2006-0004

Amending Order No. R8-2003-0061, NPDES No. CAG998001
As amended by Order No. R8-2005-0041
General Waste Discharge Requirements for Discharges to Surface Waters That Pose An Insignificant (De Minimus) Threat to Water Quality

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. On August 22, 2003, the Board adopted Order No. R8-2003-0061, NPDES No. CAG998001, General waste discharge requirements for discharges to surface waters that pose an insignificant (De Minimus) threat to water quality. On March 4, 2005, Order No. R8-2005-0041 amended Order No. R8-2003-0061 to allow for coverage of previously excluded groundwater related discharges and/or de minimus discharges within the San Diego Creek/Newport Bay Watershed. Coverage of these discharges under R8-2003-0061 could be authorized provided that the discharges do not contain nitrogen, selenium or TMDL pollutants of concern at levels that pose a threat to water quality.

2. Type of discharges regulated under Order No. R8-2003-0061 did not include discharges of filter backwash water from treatment facilities. Filter backwash water from water treatment facilities discharges pose a de minimus threat to water quality.

3. It is appropriate to amend Order No. R8-2003-0061 to include discharges of filter backwash water from water treatment facilities in Finding No. 1 of Order No. R8-2003-0061.

4. In accordance with Water Code Section 13389, the amendment of Order No. R8-2003-0061, NPDES No. CAG998001 is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

5. The Board has notified the dischargers and other interested agencies and persons of its intent to amend Order No. R8-2003-0061 and has provided them with an opportunity to submit their written views and recommendations.

6. The Regional Board, in a public meeting, heard and considered all comments pertaining to the amendment.

IT IS HEREBY ORDERED that Order No. R8-2003-0061 shall be amended as follows:

1. Order No. R8-2003-0061, Page 3 of 14, revise Finding 9 as follows:

   9. This general permit regulates de minimus discharges (as listed below) to surface waters. An entity(ies)/individual(s) proposing de minimus discharges is hereinafter referred to as "*discharger*" and upon authorization, is subject to the terms and conditions of this Order.

      a. Construction dewatering wastes; (except storm water dewatering at construction sites)[1];
      b. Wastes associated with well installation, development, test pumping and purging;
      c. Aquifer testing wastes;
      d. Dewatering wastes from subterranean seepage, except for discharges from utility company vaults;
      e. Discharges resulting from hydrostatic testing of vessels, pipelines, tanks, etc.;
      f. Discharges resulting from the maintenance of potable water supply pipelines, tanks, reservoirs, etc.;
      g. Discharges resulting from the disinfection of potable water supply pipelines, tanks, reservoirs, etc.;
      h. Discharges from potable water supply systems resulting from system failures, pressure releases, etc.;
      i. Discharges from fire hydrant testing or flushing;
      j. Non-contact cooling water;
      k. Air conditioning condensate;
      l. Swimming pool drainage;
      m. Discharges resulting from diverted stream flows;
      n. Other similar types of wastes, which pose a de minimus threat to water quality, yet technically must be regulated under waste discharge requirements; and
      o. Decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities.

2. Order No. R8-2003-0061, Page 5 of 14, revise Finding 19 as follows:

   19. The de minimus discharges described in Finding No. 9, above are not expected to cause toxicity, therefore no toxicity limits are specified in this general permit.

3. Order No. R8-2003-0061, Page 6 of 14, revise first paragraph as follows:

   IT IS HEREBY ORDERED that dischargers, their agents, successors, and assigns, who are discharging the types of wastes listed in Findings No. 9, above, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

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[1] *Storm water discharges are covered under separate permit.*

4. Order No. R8-2003-0061, Page 6 of 14, revise Discharge Specifications A.1. to include A.1.a. and A.1.b as follows:

    1. The discharge of wastewater shall not contain constituent concentrations in excess of the following limits:

        a. For types of discharges a through n (listed in Finding No. 9, above):

EFFLUENT LIMITATIONS APPLICABLE TO ALL RECEIVING WATERS	
Constituent	Maximum Concentration
Oil and Grease	15 mg/l
Sulfides	0.4 mg/l
Total Residual Chlorine[3]	0.1 mg/l
Total Suspended Solids[4]	75 mg/l
Total Petroleum Hydrocarbons	100 µg/l (ppb)

        b. The discharge of decanted filter backwash wastewater and/or sludge dewatering filtrate water from water treatment facilities (Finding No. 9.o., above), shall not contain a total suspended solids maximum daily concentration in excess of 30 mg/L.

5. Order No. R8-2003-0061, Page 13 of 14, revise Application Requirements I.2. as follows:

    2. **FOR A NEW DISCHARGER[5]**: At least 60 days before the intended start of a new discharge or individual permit expiration; the discharger shall submit an application for coverage under this Order. The authorization letter from the Executive Officer is required prior to commencement of the discharge for those types of wastes covered by this permit as described in Finding No. 9. The application shall consist of the following information:

6. Monitoring & Reporting Program No. R8-2003-0061, Page 3 of 5, revise Effluent Monitoring B.2. to include B.2.a. and B.2.b. as follows:

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3 *Compliance shall be determined at a point before wastewater mixes with any receiving water.*

4 *Not applicable if all wastewater will percolate prior to reaching any receiving water.*

5 *New discharger is an entity/individual who is not currently authorized to discharge waste under this general permit and who is proposing de minimus discharge to be covered under this general permit.*

2. The following shall constitute the effluent monitoring program:

a. For types of discharges a through n as listed in Finding 9 of the Order:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling and Analysis
Flow	---------	gpd	Daily
Oil and Grease	Grab	mg/l	During the first 30 minutes of each discharge and as directed by the Executive Officer, thereafter
Sulfides	"	"	"
Total Residual Chlorine[1,2]	"	"	"
Total Suspended Solids[2]	"	"	"
Total Dissolved Solids	"	"	"
Total Inorganic Nitrogen	"	"	"
Total Petroleum Hydrocarbons	Grab	mg/l	"

b. For the type of discharge listed in Finding 9.o. of the Order, the following shall constitute the effluent monitoring program:

Constituent	Type of Sample	Units	Minimum Frequency of Sampling and Analysis
Flow	---------	gpd	Daily
Total Residual Chlorine[1, 2]	Grab	mg/l	During the first 30 minutes of each discharge and as directed by the Executive Officer, thereafter
Total Suspended Solids[2]	"	"	"
Aluminum	Grab	µg/l (ppb)	During the first 30 minutes of each discharge and as directed by the Executive Officer, thereafter
Iron	"	"	"
Manganese	"	"	"

1 *Unless it is known that chlorine is not in the discharge.*

2 *Not applicable if all wastewater will percolate prior to reaching receiving waters.*

7. Monitoring & Reporting Program No. R8-2003-0061, Page 4 of 5, revise Reporting C.2.1. as follows:

    1) Specific type of the proposed wastewater discharge (see listing on Finding 9 of the Order);

8. All other conditions and requirements of Order No. R8-2003-0061 shall remain unchanged.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on January 18, 2006.

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Gerard J. Thibeault
Executive Officer